

Claims

[1] A thermoplastic elastomer composition which comprises:

(A1) an ethylene- α -olefin-based copolymer: 20 to 90 parts by mass,

5 (B) a crystalline polyethylene type resin: 1 to 40 parts by mass,

(C) a hydrogenated block copolymer obtained by hydrogenating a block copolymer comprising, at each of the two ends, a conjugated diene polymer block having a 1,2-
10 vinyl configuration content of 25% or less and, as the intermediate block, a conjugated diene polymer block having a 1,2-vinyl configuration content of more than 25%: 1 to 30 parts by mass,

(D) a hydrogenated block copolymer obtained by
15 hydrogenating a block copolymer comprising at least two (1) vinyl aromatic polymer blocks and at least one (2) conjugated diene polymer block or copolymer block of a vinyl aromatic compound and a conjugated diene compound: 1 to 40 parts by mass [the total of (A1), (B), (C) and (D) are 100
20 parts by mass], and

(E1) a mineral oil type softening agent: 0 to 400 parts by mass.

[2] A thermoplastic elastomer composition which comprises:

(X) an oil-extended rubber comprising 20 to 80% by mass
25 of (A2) an ethylene- α -olefin-based copolymer and 20 to 80% by mass of (E2) a mineral oil type softening agent [(A2) + (E2) = 100% by mass]: 20 to 90 parts by mass,

(B) a crystalline polyethylene type resin: 1 to 40 parts by mass,

30 (C) a hydrogenated block copolymer obtained by

hydrogenating a block copolymer comprising, at each of the two ends, a conjugated diene polymer block having a 1,2-vinyl configuration content of 25% or less and, as the intermediate block, a conjugated diene polymer block having a 1,2-vinyl configuration content of more than 25%: 1 to 30 parts by mass,

(D) a hydrogenated block copolymer obtained by hydrogenating a block copolymer comprising at least two (1) vinyl aromatic polymer blocks and at least one (2) conjugated diene polymer block or copolymer block of a vinyl aromatic compound and a conjugated diene compound: 1 to 40 parts by mass [the total of (X), (B), (C) and (D) are 100 parts by mass], and

(E1) a mineral oil type softening agent: 0 to 300 parts by mass.

[3] A thermoplastic elastomer composition according to Claim 1 or 2, which has been subjected to a dynamic heat treatment.

[4] A thermoplastic elastomer composition according to any of Claims 1 to 3, which further comprises a crystalline polypropylene.

[5] A thermoplastic elastomer composition according to any of Claims 1 to 4, wherein each of the ethylene- α -olefin-based copolymers (A1) and (A2) shows an intrinsic viscosity $[\eta]$ of 3.5 to 6.8 dl/g when measured at 135°C in a decalin solvent.

[6] A thermoplastic elastomer composition according to any of Claims 1 to 5, wherein the hydrogenated block copolymer (C) contains 5 to 90 parts by mass of the end blocks and 10 to 95 parts by mass of the intermediate block when the total

of the end blocks and the intermediate block is taken as 100 parts by mass, at least 80% of the conjugated diene double bonds present before hydrogenation is saturated in the hydrogenated block copolymer (C), and the hydrogenated block copolymer (C) has a number-average molecular weight of 50,000 to 700,000.

[7] A thermoplastic elastomer composition according to any of Claims 1 to 5, wherein the hydrogenated block copolymer (D) is constituted by (F) a polymer block composed of a vinyl aromatic compound, and (G) a polymer block composed of structural units derived from isoprene and butadiene, in which 80% or more of the unsaturated bonds in chain is hydrogenated and/or (H) a polymer block composed of butadiene, in which 80% or more of the unsaturated bonds in chain is hydrogenated, and is a hydrogenated block copolymer of (F)-(G)-(F) type or (F)-(H)-(F) type.

[8] A molded article obtained by molding a thermoplastic composition set forth in any of Claims 1 to 7.